

No. 675,094.

Patented May 28, 1901.

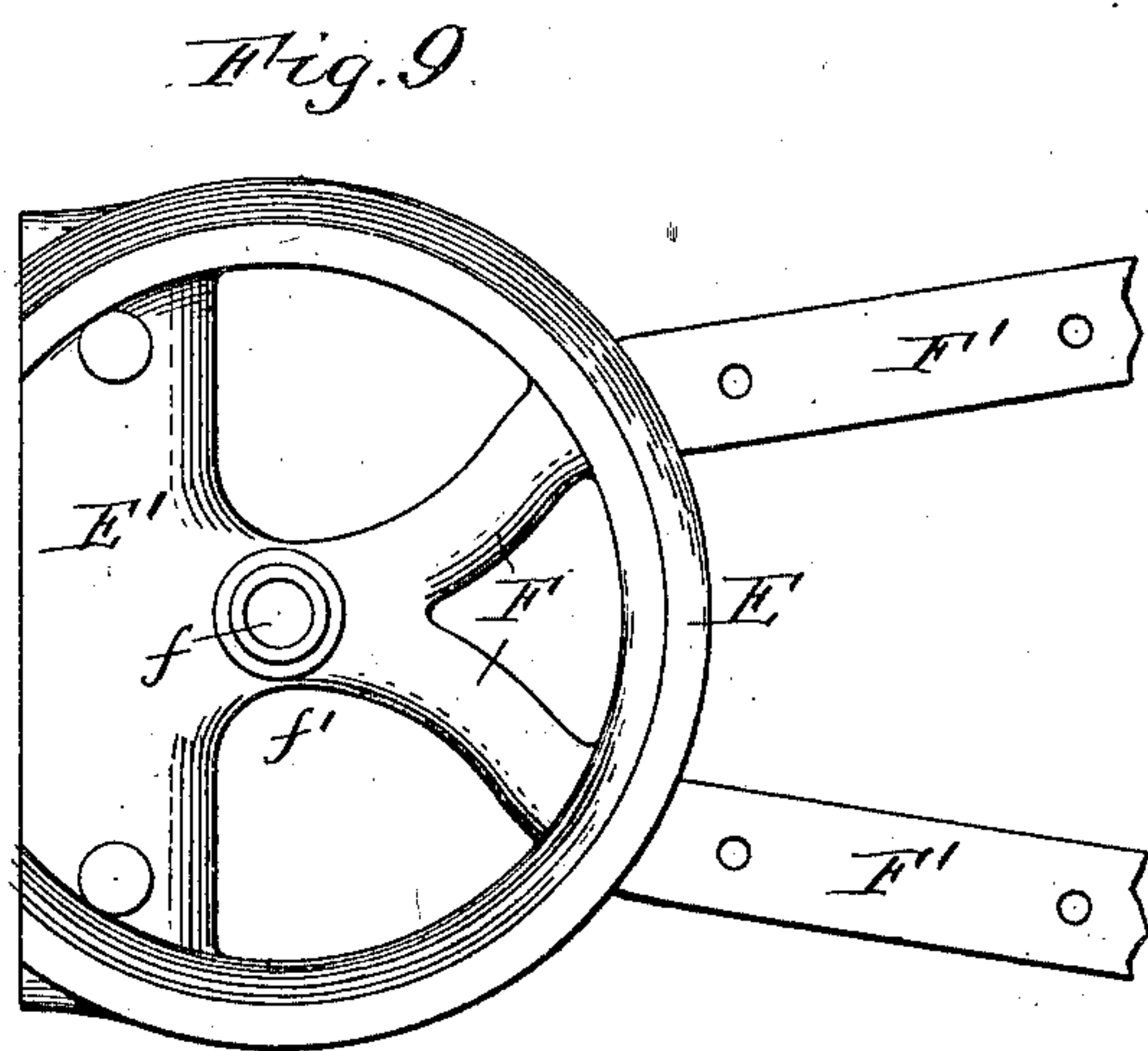
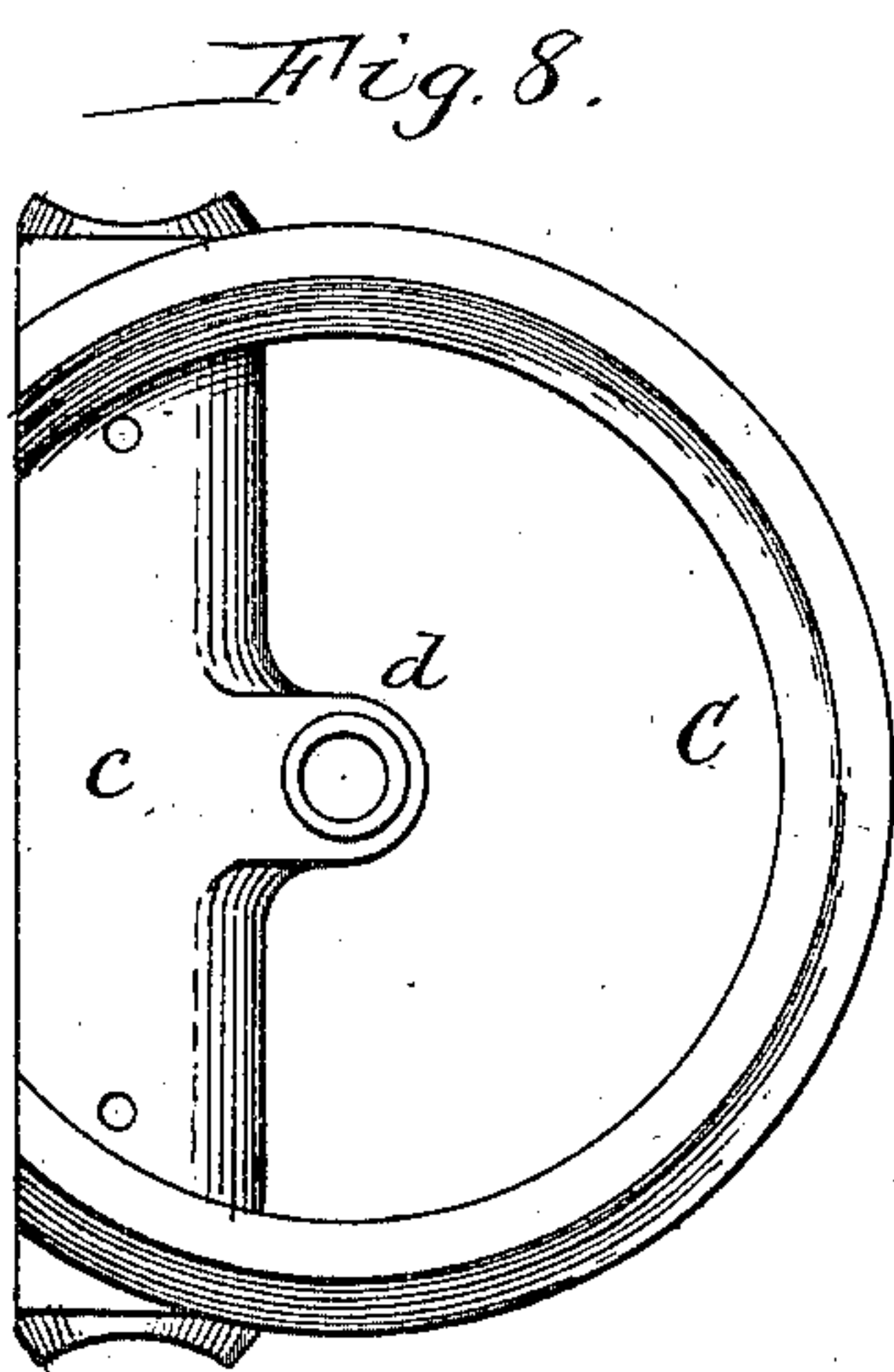
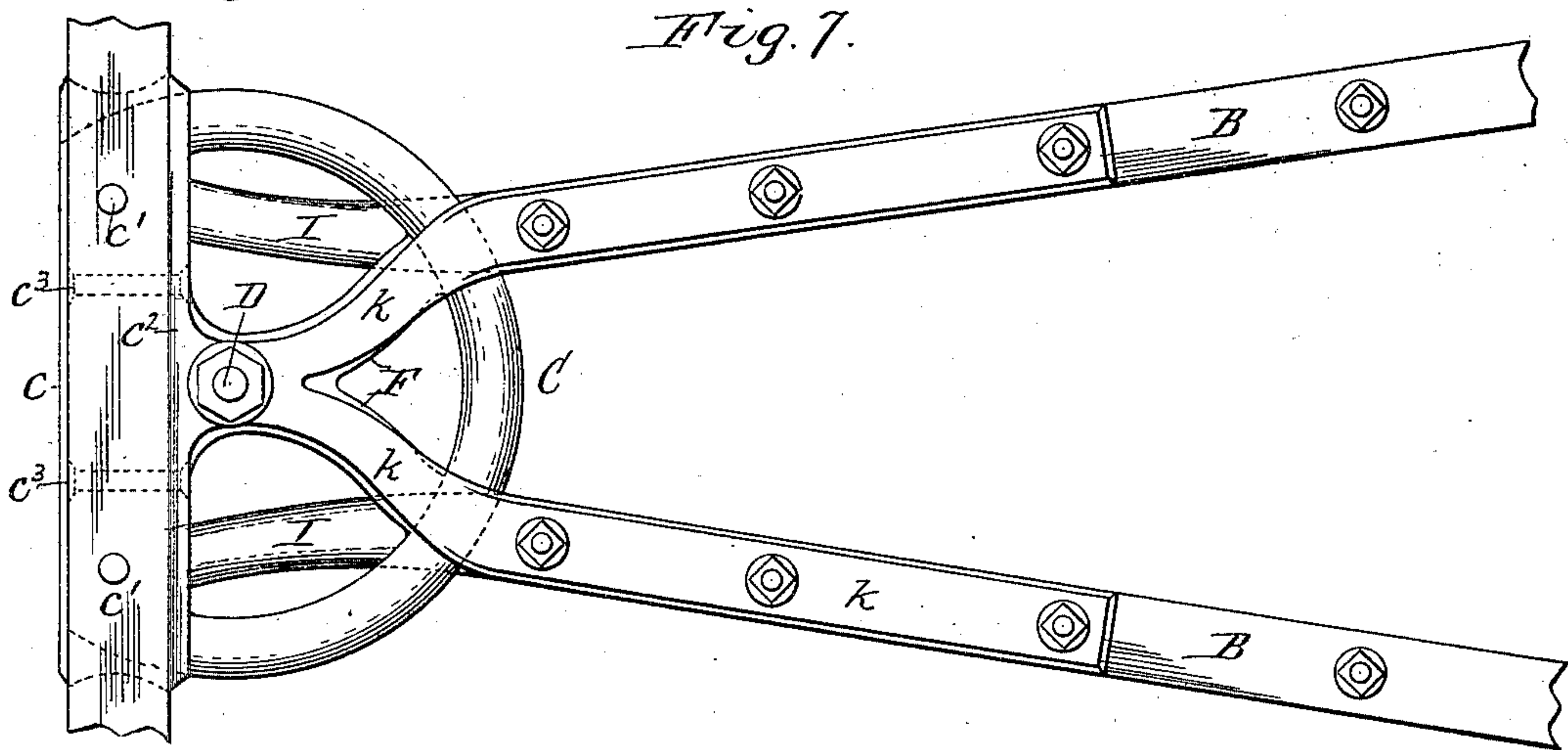
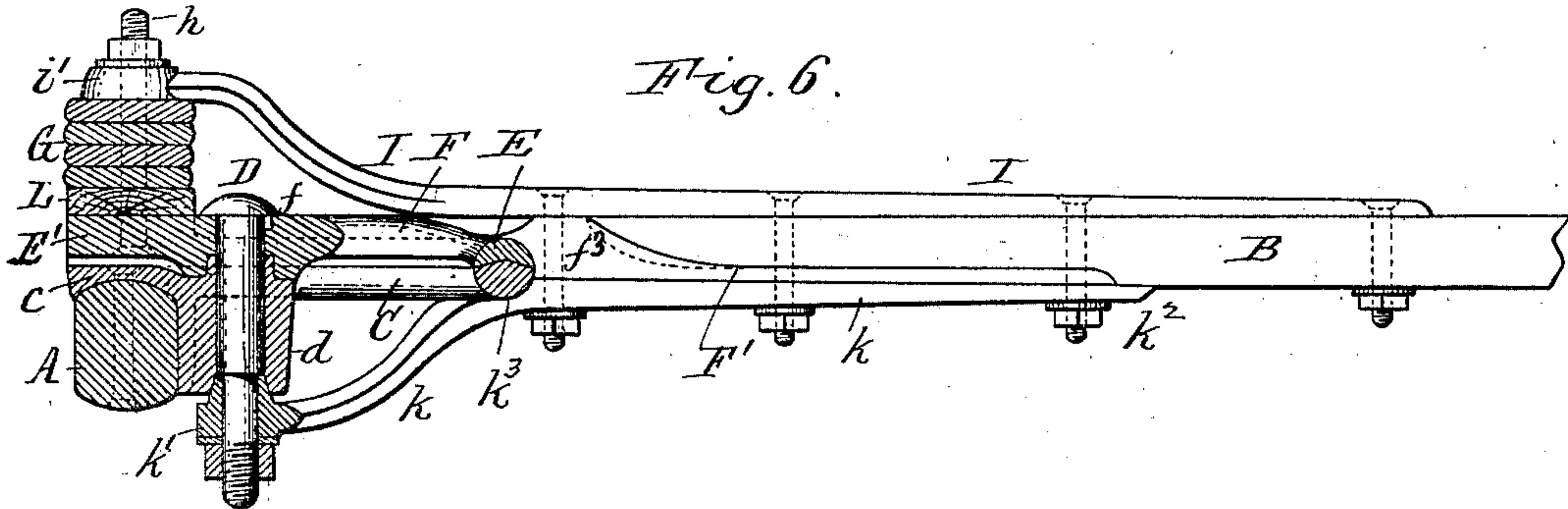
C. A. HENNICKE.

FIFTH WHEEL.

(Application filed Nov. 30, 1900.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES A. HENNICKE, OF BUFFALO, NEW YORK.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 675,094, dated May 28, 1901.

Application filed November 30, 1900. Serial No. 38,131. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HENNICKE, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Fifth-Wheels, of which the following is a specification.

This invention relates to the construction of fifth-wheels and the parts connected therewith.

The object of my invention is the production of an inexpensive fifth-wheel which is neat in appearance and combines lightness and strength and in which the contact-surfaces of the fifth-wheel members are reduced to the smallest area consistent with strength and durability, so as to reduce the friction between the same.

In the accompanying drawings, consisting of two sheets, Figure 1 is a side elevation of my improved fifth-wheel, the axle and the spring being shown in section. Fig. 2 is a top plan view thereof. Fig. 3 is a fragmentary top plan view of one of the reach members and its socket. Fig. 4 is an enlarged cross-section of one of the reach members in line 4 4, Fig. 1. Fig. 5 is a fragmentary perspective view of one of the reach-sockets. Fig. 6 is a vertical longitudinal section in line 6 6, Fig. 2. Fig. 7 is a bottom plan view of the fifth-wheel. Fig. 8 is a detached top plan view of the lower member thereof. Fig. 9 is a bottom plan view of the upper member thereof.

Like letters of reference refer to like parts in the several figures.

A is the front axle of a vehicle, and B B the rearwardly-extending reach members.

C is the lower half or member of the fifth-wheel, which consists of a comparatively narrow segment having at its front end a transverse head-block plate c , which is secured to the upper side of the axle by vertical rivets or bolts c' , as shown by dotted lines in Figs. 1 and 6. This head-block plate is provided at its inner edge with a depending flange c^2 , which bears against the rear side of the axle and which is secured to the axle by horizontal rivets or bolts c^3 . (Shown by dotted lines in Figs. 1, 2, and 7.) The depending flange c^2 is provided centrally on its rear side with

a vertical socket d , through which the king-bolt D passes.

E is the upper half or member of the fifth-wheel, which consists of a segment of the same width as the lower segment C. This upper member is provided with a head-block plate E' , arranged above the lower head-block plate c , and a pair of rearwardly-diverging braces F F, which extend from the central portion of the head-block plate to the rear portion of said fifth-wheel member, as shown in Figs. 2, 7, and 9.

f is a king-bolt socket or opening formed in the neck f' , which connects the upper head-block plate E' with the braces F. These braces are provided with rearward extensions or continuations F' , which are secured to the front portions of the reach members B by vertical bolts or rivets, as shown. The upper fifth-wheel member E, the upper head-block plate E' , the braces F, and the extensions F' are preferably formed in a single piece.

G is the transverse spring, supported on the upper head-block plate E' , and h represents vertical fastening-bolts passing through said parts.

I I are the top reach-braces, which are secured to the upper side of the reach members B and which are provided at their front ends with eyes or sockets i' , through which the bolts h pass.

Each of the extensions F' is provided at its front end with a raised enlargement f^3 , provided in its rear side with a shallow concave socket or cavity f^4 , which receives the front end of the adjacent reach member. The bottom of this socket is inclined rearwardly, and the adjacent bottom portion of the reach member is correspondingly curved, as shown by dotted lines in Figs. 1 and 6. The upper front end of the reach member is rounded or convex, as shown at f^2 , and the contiguous upper edge of the socket f^4 is concaved to conform thereto, as shown in Figs. 3 and 5. As shown in Figs. 1 and 6, the upper surface of each reach member is flush with the top of the socket f^4 , and the bottom of the reach member is recessed to receive the portion of the extension F' in rear of said socket, so that the under side of the extension is flush with the under side of the reach member. By this

construction neat flush joints are formed between the reach members and the extensions F' , which are not liable to open from the vibrations of the vehicle, and the front ends of the reach members are firmly wedged between the bottom and the front end of their sockets and the top reach-braces I and effectually prevented from checking or splitting.

k k are the two members of the bifurcated bottom stay-brace of the king-bolt, which members converge forwardly and meet in a socket k' , through which the king-bolt passes. These members are secured to the under side of the reach members B by the same bolts which fasten said members to the top reach-braces I , and their rear ends extend beyond the rear ends of the extensions F' , so as to overlap or bridge the joint between said extensions and the reach members, as shown at k^2 in Figs. 1 and 6. This construction stiffens and reinforces the reach members at this point and prevents splitting of the same. The bottom stay-braces k are provided under the rear portion of the lower fifth-wheel member C with seats k^3 , on which the adjacent rear portion of said member rests, as shown. By this construction the lower fifth-wheel member is supported practically at four points—viz., at each of its four ends and upon the two rear seats k^3 . This greatly stiffens and strengthens said lower member.

The upper fifth-wheel member is preferably provided in its under side with an inverted-V-shaped groove, which is concentric with the king-bolt, and the lower fifth-wheel member is provided on its upper side with a corresponding ridge, as shown in Fig. 6, so as to center the members on each other and prevent dust from lodging between the same.

L is a wooden block or plate interposed between the spring G and the upper head-block plate E' . By making this block of wood the same acts as a cushion, which absorbs the vibrations of the vehicle and prevents loosening of the vertical bolts which secure the spring to the upper fifth-wheel member. The upper surface of this block is concaved to fit the bottom of the spring, and by forming the block of wood the same affords the additional advantage of permitting its upper surface to be readily shaped to fit springs of dif-

ferent sweeps or curvatures, thereby doing away with the necessity of employing a special head-block plate for each particular spring.

By my improved construction of the fifth-wheel the parts are so firmly braced that the halves thereof can be made comparatively narrow without sacrificing their strength, thereby correspondingly reducing the friction between the same. This construction is, moreover, comparatively inexpensive and light and slightly in appearance.

I claim as my invention—

1. The combination with an axle, the reach members and the upper and lower fifth-wheel members, of a king-bolt connecting the same, and a bifurcated bottom stay-brace connecting the reach members with the lower end of the king-bolt and provided with seats which support the rear portion of the lower fifth-wheel segment, substantially as set forth.

2. The combination with a lower fifth-wheel member, of an upper fifth-wheel member provided on its rear side with a raised enlargement having in its rear side a concave reach socket or cavity, the bottom of which is inclined rearwardly, a reach member having its front end fitted in said socket and having the bottom of its front portion curved to conform to the bottom of said reach-socket, and a top reach-brace secured to the upper side of the reach, substantially as set forth.

3. The combination with a lower fifth-wheel member, of an upper fifth-wheel member having a rearward extension provided on its front portion with a socket, a reach member having its front end seated in said socket and provided in its under side with a recess which receives said extension, forming a flush joint therewith, and a bottom stay-brace secured to the under side of said extension and the reach member and extending across the flush joint between the reach member and the rear end of said extension, substantially as set forth.

Witness my hand this 23d day of November, 1900.

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Witnesses:

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